

Notice of Allowability

Application No.

10/786,971

Applicant(s)

LIN ET AL.

Examiner

Art Unit

Andy S. Rao

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed.
2. ☒ The allowed claim(s) is/are 1, 4-5, 8-10, 12-18, 20-23 (respectively renumbered as claims 1-17).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

ANDY RAO
PRIMARY EXAMINER

Allowable Subject Matter

1. Claims 1, 4-5, 8-10, 12-18, 20-23 are allowed.

Independent claim 1 recites an FGS encoder including "...wherein said encoder operates in a mix prediction mode when said base-layer mode selector is switched to select said coarse prediction output and said enhancement-layer mode selector is switched to select said fine prediction output, said encoder operates in an all-coarse prediction mode when both said base-layer mode selector and said enhancement-layer mode selector are switched to select said coarse prediction output, and said encoder operates in an all-fine prediction mode when both said base-layer mode selector and said enhancement-layer mode selector are switched to select said fine prediction output..." which are features that are not anticipated nor obvious over the art of record. Independent claim 8 recites an encoding method including "...a base layer with coarse prediction and an enhancement layer with fine prediction, and encoding parameters collected from each macroblock in said step include a fine prediction error value, a coarse prediction error value, and best-case and worst-case mismatch errors in fine prediction..." which is a feature that is not anticipated nor obvious over the art of record. Independent claim 18 recites a bit plane truncating method including low rate bit truncation "...wherein said low-rate bit truncation allocates each I/P-frames of said enhancement layer with a number of bits proportional to a ratio of the number of bits used for prediction in each I/P-frames to total number of bits used for fine prediction for all I/P-frames in said group of pictures, and allocates no bit to any B-frame of said enhancement layer..." which are features that are not anticipated nor obvious over the art of record. Independent claim 23 recites a bit plane truncation method including "... performing low-rate bit truncation if total bits available for allocation for said enhancement layer are less

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than or equal to total number of enhancement-layer bits in all I/P-frames in said group of pictures used for fine prediction; performing medium-rate bit truncation if total bits available for allocation for said enhancement layer are less than or equal to total number of enhancement-layer bits in said group of pictures used for fine prediction but greater than total number of enhancement-layer bits in all I/P-frames in said group of pictures used for fine prediction; and performing high-rate bit truncation if total bits available for allocation for said enhancement layer are greater than total number of enhancement-layer bits in said group of pictures used for fine prediction..." which are features that are not anticipated nor obvious over the art of record. Dependent claims 4-5, 9-10, 12-17, and 20-22 are allowed for the reasons concerning the independent claims.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
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asr
February 27, 2007

ANDY RAO
PRIMARY EXAMINER